# THE TAXONOMY OF SOME INDO-PACIFIC MOLLUSCA

# PART 14. WITH DESCRIPTIONS OF TWO NEW SPECIES

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Abstract. Phos naucratoros Watson, P.hirasei Sowerby, P.nigroliratus Habe, P.elegantissimus Hayashi & Habe, and P. cf. borneensis Sowerby, are new geographical records from the Philippines and Nassarius oneratus (Deshayes), N.multicostatus (A. Adams), Scabricola vicdani Cernohorsky, Hastula anomala (Gray), Lophiotoma kingae Powell and Conus consors Sowerby, are new geographical records from the Fiji Islands. Latirus martinorum sp.n., a deep-water fasciolarid from the Philippines and Terebra bratcherae sp.n., a terebrid from West Australia, are described as new species. The radulae and metapodial tentacles of Nassarius gibbosulus (Linnaeus) and N.circumcinctus (A.Adams) are compared, and the species Vexillum (Costellaria) verecundulum (Hervier) is elucidated on the basis of a live-taken specimen. The authorship of the family-group name Litiopidae is credited to Gray, 1847, instead of Fischer, 1885.

### Family BUCCINIDAE

### Genus Phos Montfort, 1810

Phos Montfort, 1810, Conchyl.Syst. 2:495. Type species by OD Murex senticosus Linnaeus, 1758. Recent, Indo-Pacific.

### Phos naucratoros Watson, 1882

- 1882. *Phos naucratoros* Watson, J.Linn.Soc.Lond.Zool. 16:360; 1977 Cernohorsky, Rec.Auckland Inst.Mus. 14:127,figs.17,18 (illustrated holotype).
- 1886. Phos naucratoris (sic) Watson, Rept.Sci.Res.Voy.H.M.S. "Challenger" 15:218, pl.13, figs.11a-c.

TYPE LOCALITY. Admiralty I, Papua New Guinea, 150 fathoms (275 m).

Cernohorsky (1977) illustrated the holotype of *P.naucratoros* and reported the species from off Cape Moreton, Queensland, Australia. The range is now extended to the Philippine Is, where specimens have been dredged at Balicasag I, Bohol, in tangle nets, 183-275 m, Punta Engano, Mactan I, Cebu (both *ex*-coll. V.Dan) and off Coamen I, western Bohol reef, in 190-230 m (*leg.* R.Martin).

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(Fig.1)

### Phos hirasei Sowerby, 1913

1913. Phos hirasei Sowerby, Ann.Mag.Nat.Hist. (8), 11:558,pl.9,fig.2; 1972 Okutani, Bull. Tokai Reg. Fish. Lab. No. 72:93, textfig. 38; 1978 Cernohorsky, Rec. Auckland Inst. Mus. 15:55, figs. 1,2 (illustrated holotype).

## TYPE LOCALITY. Kii, Japan.

Cernohorsky (1978) illustrated the holotype of P.hirasei and reported the species from the Kermadec Is. Specimens have recently been trawled in the Philippines, at Balicasag I, Bohol, in tangle nets, 183-275 m, Punta Engano, Mactan I, Cebu (both ex-coll.V.Dan) and off Coamen I, western Bohol reef, in 190-230 m (leg. R.Martin). The number of axial ribs varies greatly, and in some specimens 27 axial ribs on the body whorl have been counted.

## Phos nigroliratus Habe, 1961

1961. Phos nigroliratum Habe, Col.illust.shells Japan 2:61, App.p.21, pl.31, fig.9.

TYPE LOCALITY. Off Isshiki-cho, Hazu-gun, Aichi Pref., Honshu, Japan, 100 m.

This species is now recorded from off Coamen I, western Bohol reef, Philippines, in 190-230 m (leg. R. Martin). The species is similar in colouring to P. elegantissimus Hayashi & Habe, 1965, but is less inflated with narrowly chanelled sutures and axial ribs which extend above the sutures.

Phos elegantissimus Hayashi and Habe, 1965

Phos elegantissimus Hayashi & Habe, Venus: Jap. J. Malac. 24(1):11, 14, pl. 1, fig. 4; 1972 1965. Okutani, Bull. Tokai Reg. Fish. Res. Lab. No. 72:93, fig. 40.

TYPE LOCALITY. Enshu Nada, off Honshu, 100-120 m.

The species' range now extends to the Philippines, where it has been dredged off Coamen I, western Bohol reef, in 190-230 m (leg. R.Martin).

# Phos cf. borneensis Sowerby, 1859

1859. Phos borneensis Sowerby, Thes. Conchyl. 3(19):91,pl.222,fig.22.

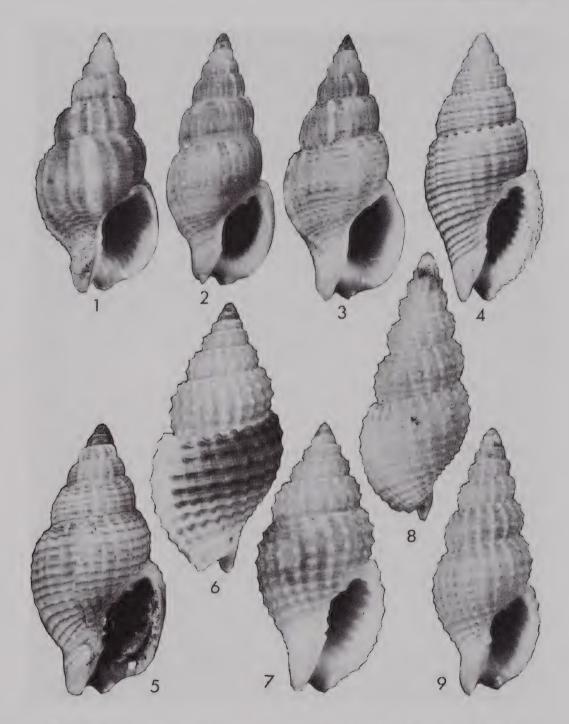
TYPE LOCALITY. Borneo [Indonesia].

Type specimen. Not found. The holotype of P.borneensis originally in the Cuming collection has as yet not been located in the British Museum (Nat. Hist.), London (K. Way in litt. 26/11/1986).

(Fig.4)

(Fig.5)

(Figs.6,7)



Figs. 1-9. 1. Phos naucratoros Watson. Off Coamen I, Philippines, 190-230 m; 28.3 mm. 2,3.
P.hirasei Sowerby. Same locality. 2. 27.5 mm. 3. Broad form, 25.2 mm. 4. P.nigroliratus Habe.
Same locality; 17.7 mm. 5. P.elegantissimus Hayashi & Habe. Same locality; 18.0 mm. 6,7. P.
cf. borneensis Sowerby. Same locality; 16.2 mm. 8,9. P.bathyketes Watson. Holotype from the Philippine Is, B.M.(N.H.) No. 1887.2.9.750.; 22.5 mm.

A single specimen tentatively associated with *P.borneensis* has been dredged at Coamen I, western Bohol reef, Philippines, in 190-230 m (*leg.* R. Martin). The shell is 16.3 mm in length, with convex whorls which are regularly sculptured with axial ribs which bear regularly spaced nodules, and interspaces carry 2-3 fine intermediate spiral striae; the protoconch is multispiral with the last half turn bearing arcuate axial ribs and 3 fine spiral cords, the outer lip has 9 strong lirae and the columella 2 main folds + 2 smaller posterior denticles + 1 parietal denticle and the outer lip ends in a very broad varix. The shell is white with the dorsal side of the body whorl stained orange-brown (Figs.6,7).

Watson (1882) described a *Phos bathyketes* from the Philippine Is, and in his description he compared his new species with *P.borneensis* Sowerby. The holotype of *P.bathyketes* is in the British Museum (Nat.Hist.), London No.1887.2.9.750., length 22.5 mm, width 8.6 mm. The holotype is not fully mature, and although similar in sculpture and feature of tri-carinate embryonic whorl, differs appreciably in form and shape of whorls (Figs.8,9). There is now very little trace of the colour of "dull brownish-yellow, which is a little deeper on the tubercles" (Watson 1882), and the shell is uniformly creamy-white. Without access to the holotype, the taxon *P.borneensis* Sowerby will remain a *nomen dubium*, since the solitary dorsal view illustration in Sowerby (1859:p.222,fig.22) and very brief description do not assist in a positive interpretation of the species.

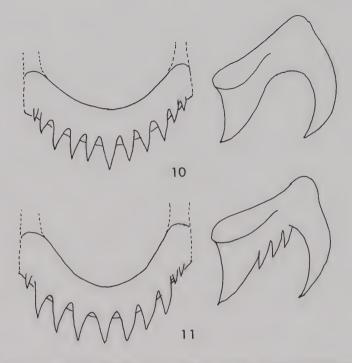
#### Family NASSARIIDAE

Cernohorsky (1986) discussed the specific separation of the two similar species Nassarius (Plicarcularia) gibbosulus (Linnaeus, 1758) and N. (P) circumcinctus (A.Adams, 1852), based on material collected at Kizkalesi, southern Turkey (leg. C.Schmidt).

Mrs Schmidt collected additional numbers of both species at Kizkalesi during August 1986, and supplied additional information on the external morphology of the animal and the habitat of the species. N. (P) circumcinctus congregates c. 20-25 m from the rocky shore at a depth of c. 1.5 m, while N. (P) gibbosulus lives in colonies 30-40 m from the shore at a depth of 2.0-2.5 m, on a sand substratum at a water temperature of 29°C. In the intervening area occasional specimens of both species may be found.

The animals of the two species are superficially similar but differ in one important diagnostic feature: N.(P.) gibbosulus has 2 metapodial tentacles at the posterior of the foot while N.(P.) circumcinctus has only a single central metapodial tentacle. The radula of a male N.(P.) circumcinctus, shell-length 14.8 mm, has 51 rows of teeth + 9 nascentes. Rachidians are typically nassarine in structure with 11 denticles and the laterals are simple and bicuspid (Fig.10). The radula of a male N.(P.) circumcinctus, shell-length 4.8 mm, has 51 rows of teeth + 9 nascentes. Rachidians are typically nassarine in structure with 11 denticles and the laterals are simple and bicuspid (Fig.10). The radula of a male N.(P.) circumcinctus, shell-length 11.5 mm, with 54 rows of teeth + 8 nascentes, is considerably smaller in relation to shell-length than that of N.(P.) gibbosulus. Rachidians have 10 denticles and laterals, in addition to the two main cusps, also have 2-3 small, central intermediate denticles (Fig.11). It is not known if this feature of intermediate denticles is constant in all populations of N.(P.) circumcinctus.

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Figs. 10,11. Half-row of radulae. 10. Nassarius (Plicarcularia) gibbosulus (Linnaeus). Male shell-length 14.8 mm. 11. N. (P) circumcinctus (A.Adams). Male shell-length 11.5 mm.

### Genus Nassarius Dumèril, 1806

Nassarius Dumèril, 1806, Zool. Analytique p. 166. Type species by SM (Froriep, 1806) Buccinum arcularia Linnaeus, 1758. Recent, Indo-Pacific.

### Subgenus Plicarcularia Thiele, 1929

Plicarcularia Thiele, 1929, Handb.syst.Weicht. 1:324. Type species by M Nassa (Plicarcularia) thersites (Bruguière) = Buccinum pullus Linnaeus, 1758. Recent, Indo-Pacific.

### Nassarius (Plicarcularia) oneratus (Deshayes, 1863)

(Figs. 12, 13)

- 1863. Nassa onerata Deshayes, Cat.moll.Ile Reunion p.130, pl.12, figs. 24, 25.
- 1984. Nassarius (Plicarcularia) oneratus (Deshayes), Cernohorsky, Bull. Auckland Inst. Mus. No.14:74, pl.6, figs. 11-13 (extended synonymy).

TYPE LOCALITY. Reunion I, Indian Ocean.

DISTRIBUTION. From Reunion I to the Marianas and Loyalty Is. Now the Fiji Is.

Specimens of N. (P.) oneratus were recently collected at Susui, N.Lau group, Fiji Is (leg. B.Parkinson). This represents an eastward extension from the Loyalty Is.

### Subgenus Zeuxis H. and A. Adams, 1853

Zeuxis H. & A. Adams, Gen.Rec.Moll. 1:119. Type species by SD (Cossmann, 1901) Buccinum taenia Gmelin, 1791 = B.olivaceum Bruguière, 1789. Recent, Indo-Pacific.

# Nassarius (Zeuxis) multicostatus (A.Adams, 1852) (Figs. 14, 15)

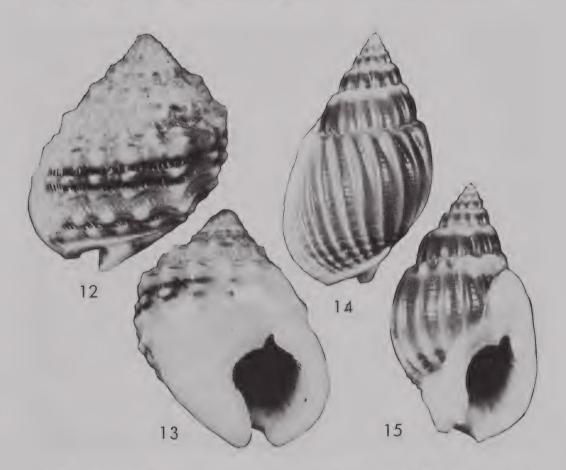
1852. Nassa multicostata A.Adams, Proc.Zool.Soc.Lond. Pt.19:98.

1984. Nassarius (Zeuxis) multicostatus (A.Adams), Cernohorsky, Bull.Auckland Inst.Mus. No.14:143, pl.27,figs.9,10; pl.28,fig.1 (extended synonymy).

TYPE LOCALITY. Batangas, Luzon, Philippines, 7 m.

DISTRIBUTION. From Indonesia to the Philippines and the Solomon Is. Now the Fiji Is.

Specimens of N.(Z.) multicostatus were collected at Naselesele, Taveuni I, Fiji Is (leg. B.Parkinson). This is an eastward range extension from the Solomon Is.



Figs. 12-15. 12,13. Nassarius (Plicarcularia) oneratus (Deshayes). Susui, Lau group, Fiji Is; 10.8 mm. 14,15. N. (Zeuxis) multicostatus (A.Adams). Naselesele, Taveuni, Fiji Is; 14.2 mm.

#### Family LITIOPIDAE

1847. Litiopina Gray, Proc.Zool.Soc.Lond. p.155.

1854. Litiopinae H. & A. Adams, Gen, Rec. Moll, 1:324.

Houbrick (1987) in a recent paper on the anatomy of *Alaba* and *Litiopa*, cited the family-group name as Litiopidae Fischer, 1885. However, Gray (1847) and H. & A. Adams (1854) both used the family-group name many years earlier, and the authorship of Litiopidae must be credited to Gray (Art.36a of ICZN).

### Family FASCIOLARIIDAE

#### Genus Latirus Montfort, 1810

Latirus Montfort, 1810, Conchyl.Syst. 2:531. Type species by OD L.aurantiacus Montfort, 1810 = Murex gibbulus Gmelin, 1791. Recent, Indo-Pacific.

#### Latirus martinorum sp. n.

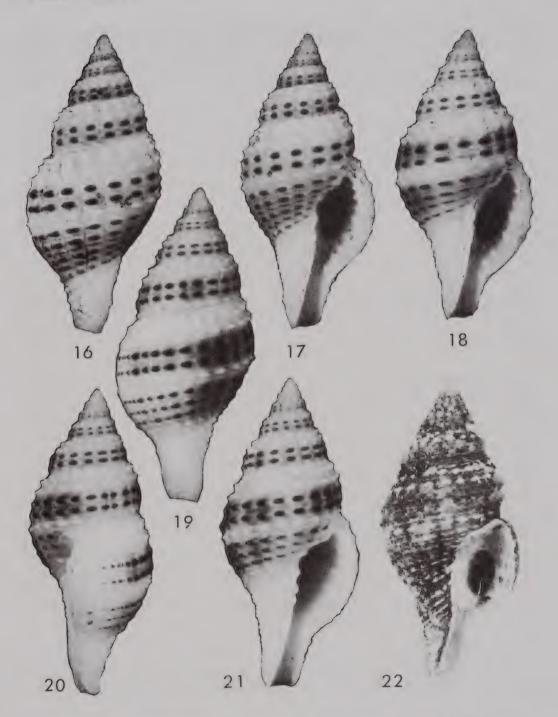
(Figs. 16-24)

Shell moderately small, up to 18.0 mm in length, fusiformly-elongate, width 43-50% of length, solid, protoconch of 21/4-23/4 smooth, glassy-white embryonic whorls which terminate in 4-5 plain arcuate axial ribs before merging into the granulose sculpture of  $5\frac{1}{4}-6\frac{1}{4}$  slightly convex whorls of teleoconch. Sculpture granulose, axial sculpture consisting of low axial ribs which number from 15-19 on penultimate and from 12-20 on body whorl; spiral cords override axial ribs and form laterally elongated nodules; penultimate whorl with 5 spiral rows and body whorl with 13-16 rows of nodules, interspaces of nodules with a single fine intermediate spiral thread and numerous, close-set macrostriae. Aperture longer than spire, 54-60% of length, outer lip convex and thickened and with 7-10 strong lirae which continue inside aperture, columella with 3-4 lirae situated centrally, 1-2 on parietal wall and another 1-2 lirae opposite anal canal. Siphonal canal moderately produced, siphonal fasciole with 6-12 close-set, oblique cords. White in colour, spire whorls ornamented with 2 spiral rows of reddish-brown nodules anteriorly, centre of body whorl with 2-3 rows of reddishbrown nodules followed by a single row of white nodules and 4-7 rows of reddishbrown nodules, aperture porcellaneous-white.

Periostracum thin and dirty greyish-brown. Operculum corneous, irregularly ovate and yellowish-brown. Radula minute and with 123 rows of teeth + 10 nascentes. Rachidians small and tricuspid, laterals with 4 large plain cusps and a small inward-facing cusp (Fig.23).

TYPE LOCALITY. Off Coamen I, western Bohol reef, Philippines, in 200-240 m (leg. R.Martin, 1986).

Holotype. In the Auckland Institute and Museum No. TM-1373, length 15.6 mm, width 6.9 mm, height of aperture 8.6 mm (Figs. 16, 17).

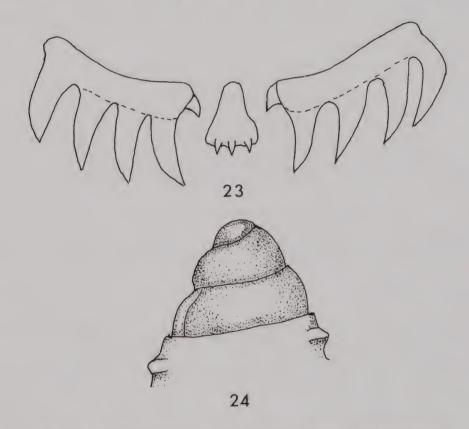


Figs.16-22. Latirus martinorum sp. n. Off Coamen I, Philippines, 200-240 m. 16,17. Holotype AIM No. TM-1373; 15.6 mm. 18. Paratype, 14.2 mm. 19-21. Paratype, 15.9 mm. 22. Paratype with periostracum, 15.8 mm.

*Paratypes.* Paratypes from the type locality are in the National Museum of Natural History, Smithsonian Institution, Washington, the British Museum (Natural History), London, the Australian Museum, Sydney, coll. R. Martin, Cebu City, Philippines and other collections. A total of 38 specimens have been examined.

There is no known similar species in the Fasciolariidae with which Latirus martinorum could be compared. The radula is much closer to species of Fusinus than it is to Latirus, but since the number of cusps on the lateral teeth is known to vary from 6-11 in Fusinus, the same variation can also be expected in Latirus. Fusilatirus pauli McGinty, 1955, the type species of Fusilatirus McGinty, 1955 (= Dolicholatirus Bellardi, 1886) from the Florida Keys, has lateral teeth with only 2 cusps.

The species is named for Mr & Mrs R. Martin, Cebu City, Philippines, who discovered this and other new species in the Bohol area.



Figs. 23,24. Latirus martinorum sp. n. 23. Full row of radula. 24. Protoconch.

# Family MITRIDAE

## Genus Scabricola Swainson, 1840

Scabricola Swainson, 1840, Treat.Malac. pp.130,131,319. Type species by SD (Gray, 1847) Mitra serpentina Lamarck, 1811 = Voluta variegata Gmelin, 1791. Recent, Indo-Pacific.

### Scabricola vicdani Cernohorsky, 1981

1981. Scabricola vicdani Cernohorsky, Rec. Auckland Inst. Mus. 18:193, figs. 1-3.

TYPE LOCALITY. Punta Engano, Mactan I, Cebu, Philippines.

Previous records of the species were from the Philippines and Papua New Guinea. A specimen of *S.vicdani* has been collected at Viti Levu Bay, N.E. Viti Levu, Fiji Is, in grey mud in 19 m (*leg.* B.Parkinson). This record is an eastward range extension for the species.

# Family COSTELLARIIDAE

# Genus Vexillum Röding, 1798

Vexillum Röding, 1798, Mus.Bolten. p.138. Type species by SD (Woodring, 1928) V.plicatum Röding, 1798 = Voluta plicaria Linnaeus, 1758. Recent Indo-Pacific.

# Subgenus Costellaria Swainson, 1840

Costellaria Swainson, 1840, Treat. Malac. pp.130.320. Type species by M Mitra rigida Swainson, 1821 = Mitra semifasciata Lamarck, 1811. Recent, Indo-Pacific.

# Vexillum (Costellaria) verecundulum (Hervier, 1897) (Fig.26)

- 1897. Mitra (Costellaria) verecundula Hervier, J.Conchyl. 45(1):68; 1899 Hervier, J.Conchyl. 46(3):212, p.10, fig. 5; 1923 Dautzenberg & Bounge, J.Conchyl. 67(2):219.
- 1950. Mitra verecundula Hervier, Fischer-Piette, J.Conchyl. 90(3):164.
- 1981. Vexillum (Costellaria) verecundula (Hervier), Cernohorsky, Bull.Mus.Nat.Hist.Nat. Paris (4), 3(A-No.1):98, pl.2,figs.9,10.

TYPE LOCALITY. Lifu, Loyalty Is.

In a paper on Hervier's type specimens of Mitridae and Costellariidae (Cernohorsky 1981) I considered the taxon V. (C.) verecundulum Hervier, 1897, a species inquirenda. The 3 syntypes examined, length 7.2 - 9.1 mm, were all very worn and in the absence of live taken examples the species could not be elucidated. The recent collection of a living 6.9 mm specimen at Naselesele, Taveuni I, Fiji Is (leg. B.Parkinson) enables me to confirm the validity of the taxon V. (C.) verecundulum.

(Fig.25)

(Figs.27-30)



Figs 25.26. Scabricola vicdani Cernohorsky. Viti Levu Bay, Fiji Is, 19 m; 28.6 mm. 26. Vexillum (Costellaria) verecundulum (Hervier). Naselesele, Taveuni, Fiji Is; 6.9 mm.

The species is small in size, fusiformly-elongate, with  $6\frac{1}{2}$  regularly convex whorls and a missing protoconch. Axial ribs number 11 on the penultimate whorl and 8 on the body whorl, spiral grooves are distinct and number 7-8 on the penultimate and 21 on the body whorl. Aperture is shorter than the spire, lirate within, columella with 4 folds. White in colour, with a single brown peripheral band which tends to elongate into spots on the body whorl.

## Family TEREBRIDAE

### Genus Terebra Bruguière, 1789

Terebra Bruguière, 1789, Encycl.Méth.Vers (1) p.XV. Type species by SD (Lamarck, 1799) Buccinum subulatum Linnaeus, 1767. Recent, Indo-Pacific.

# Terebra bratcherae sp. n.

Shell small, 9.7 - 14.1 mm in length, width 20-25% of length, teleoconch of 8-10<sup>1</sup>/<sub>4</sub> weakly convex to almost flat-sided whorls, protoconch with 1<sup>1</sup>/<sub>2</sub> large, bulbous and glassy smooth embryonic whorls, sutures distinctly incised. Upper spire whorls with a moderately crisp sculpture of arcuate axials and 6-7 spiral threads; axials extend from suture to suture, anteriorly bisected by a spiral groove. Both axial and spiral sculpture becoming obsolete on last two whorls, axial ribs slender, irregular and arcuate, numbering 26-31 on penultimate and from 23-35 on body whorl; obsolete spiral striae number from 4-6 on penultimate whorl. Axial ribs on body whorl fade out at

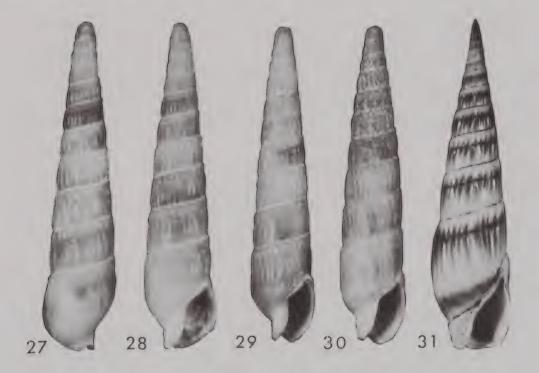
periphery, lower half of body whorl with 6-7 close-set spiral striae. Aperture small, columella calloused and with a weak basal fold anteriorly. Cream in colour, ornamented with nebulous orange-brown axial streaks. Operculum elongate-ovate, thin and corneous, pale yellowish-brown in colour.

TYPE LOCALITY. St.37, N.W. of Rottnest I, West Australia, 31°44'S & 115°03'E, 183-192 m (leg. H.M.A.S. "Diamantina", 18-3-1972).

Holotype. In the Australian Museum, Sydney, No. C-149460, length 14.1 mm, width 3.2 mm (Figs.27,28).

*Paratypes.* Four paratypes from the type locality in the Australian Museum, Sydney. One paratype, length 9.7 mm, width 2.4 mm from St.74, N. of Lancelin, West Australia, 31° 16'S & 114° 54'E, 274 m, fine mud (*leg.* H.M.A.S. "Diamantina", 23-3-1972) in the Western Australian Museum, Perth, No. 365-86.

This small species is not really similar to any other described Indo-Pacific species. It superficially resembles *T.fuscotaeniata* Thiele, 1925, from Sumatra, Indonesia, which is similar in size and also has a paucispiral protoconch, but *T.fuscotaeniata* has more numerous, convex whorls, more distinct axial ribs and spiral striae and no subsutural groove. Another superficially similar species is *T.tiurensis* Schepman, 1913,



Figs. 27-31. 27-30. Terebra bratcherae sp. n. N.W. of Rottnest I, W.Australia, 183-192 m. 27,28. Holotype AMS No. C-149460; 14.1 mm. 29. Paratype, 13.4 mm. 30. Paratype, 13.7 mm. 31. Hastula (Impages) anomala (Gray). Vatukarasa, Fiji Is; 36.5 mm.

(Fig.31)

from Timor, Indonesia, which is similar in size with similar whorls, but *T.tiurensis* is punctate on the subsutural band, the protoconch is conical and violet in colour and spiral sculpture is absent.

This species is named for Mrs Twila Bratcher, Museum Associate of the Los Angeles County Museum of Natural History, in recognition of her research and publication on the family Terebridae, and who has, in many ways, assisted my own studies of Indo-Pacific Mollusca.

### Genus Hastula H. and A. Adams, 1853

Hastula H. & A. Adams, 1853, Gen.Rec.Moll. 1:225. Type species by SD (Cossmann, 1896) Terebra strigillata Lamarck = Buccinum strigilatum Linnaeus, 1758. Recent, Indo-Pacific.

### Subgenus Impages E.A. Smith, 1873

Impages E.A. Smith, 1873, Ann. Mag. Nat. Hist. (4), 11(64):263. Type species by SD (Cossmann, 1896) Terebra caerulescens Lamarck, 1822 = Buccinum hecticum Linnaeus, 1758. Recent, Indo-Pacific.

### Hastula (Impages) anomala (Gray, 1834)

- 1834. Terebra anomala Gray, Proc.Zool.Soc.Lond. Pt.2:62; 1844 Hinds in Sowerby, Thes.Conchyl. 1:180, pl.44,fig.97; 1917 Hirase, Terebridae Jap.Emp. p.33,pl.2,figs.6,7.
- 1961. Noditerebra (Diplomeriza?) anomala (Gray), Oyama, Venus: Jap.J.Malac. 21(2):182.
- 1961. Impages (?) anomala (Gray), Oyama & Takemura, Mollusc.shells Res.Expl.Inst. 5:pl.47,figs.12,13.
- 1987. Hastula (Impages) anomala (Gray), Bratcher & Cernohorsky, Living Terebras world p.190,pl.58,figs.229a-c; col.pl.D,fig.7.

TYPE LOCALITY. Singapore, Malaysia (designated Bratcher & Cernohorsky 1987).

The species has been previously reported to live in the area extending from Madagascar to the Philippines and Japan. Specimens have been collected at Vatukarasa, S.coast of Viti Levu, Fiji, in black volcanic sand, in 6 m (*leg.* B.Parkinson). This is a major eastward range extension.

### Family TURRIDAE

#### Genus Lophiotoma Casey, 1904

Lophiotoma Casey, Trans.Acad.Sci.St.Louis 14(5):130. Type species by SD (Woodring, 1928) Pleurotoma tigrina Lamarck, 1822 = P.acuta Perry, 1811. Recent, Indo-Pacific.

### Subgenus Xenuroturris Iredale, 1929

Xenuroturris Iredale, 1929, Mem. Queensl. Mus. 9(3):285. type species by OD X. legitima Iredale, 1929 = Pleurotoma cingulifera Lamarck, 1822. Recent, Indo-Pacific.

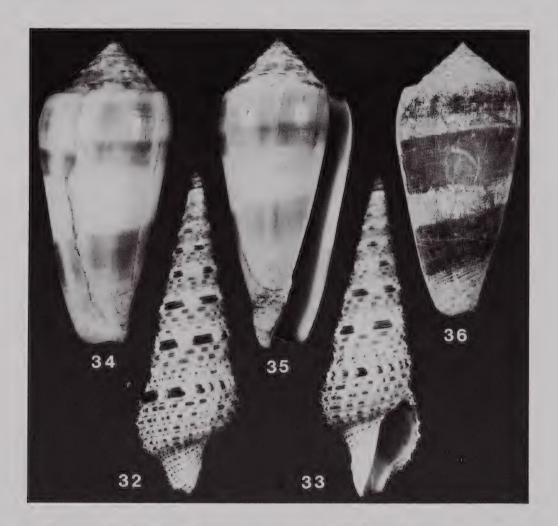
### Lophiotoma (Xenuroturris) kingae (Powell, 1964)

(Fig.32,33)

1964. Xenuroturris kingae Powell, Indo-Pacific Moll. 1(5):325, pl.252.fig.6; 1979 Kay, Hawaiian mar.shells p.342,figs. 111F, 1130,P; 1980 Cernohorsky, Rec.Auckland Inst.Mus. 16:184,fig.31.

TYPE LOCALITY. Off Keehi, Oahu, Hawaiian Is, 20-40 fathoms (36-73 m).

The species was originally described from the Hawaiian Is, and a westward range extension to Guam, Marianas Is, was later reported (Cernohorsky 1980). A specimen has recently been collected at Cuvu Harbour, W.Viti Levu, Fiji Is, in white sand, in 27 m (*leg.* B.Parkinson). This record represents a considerable range extension south of the equator.



Figs. 32-36. 32,33 Lophiotoma (Xenuroturris) kingae (Powell). Cuvu Harbour, Fiji Is, 27 m;
27.6 mm. 34-36. Conus consors Sowerby. 34,35. Nukulau I, Fiji Is, 25 m; 67.4 mm. 36. Natewa Bay, Fiji Is, 25 m. Specimen with periostracum; 55.2 mm.

## Family CONIDAE

### Genus Conus Linnaneus, 1758

Conus Linnaeus, Syst.Nat.ed.10:712. Type species by SD (Children, 1823) C.marmoreus Linnaeus, 1758. Recent, Indo-Pacific.

#### Conus consors Sowerby, 1833

(Figs.34-36)

1833. Conus consors Sowerby, Conch.Illust. Pt.36:fig.42; 1843 Reeve, Conch.Icon.1:pl.21, fig.121; 1858 Sowerby, Thes.Conchyl. 3(18):36, pl.20,fig.492; 1979 Walls, Cone shells p.366, illust.on p.241 (see for synonymy); 1985 Coomans, Moolenbeek & Wils, Basteria 48:257, figs.87,441,519-521.

TYPE LOCALITY. Singapore, Malaysia (designated by Coomans, Moolenbeek & Wils 1985).

Walls (1979) reported the species from as far east as the Solomon Is and Coomans, Moolenbeek & Wils (1985) from New Caledonia. Several specimens of *C.consors* have been collected by Mr B. Parkinson and his team of divers at Nukulau I, Fiji, in soft brown mud, at 25 m depth, and at Natewa Bay, Fiji, in black volcanic soil, in 25 m.

It has been suggested that *C.consors* is synonymous with *C.magus* Linnaeus. Apart from distinct morphological differences between the two species, *C.magus* is a common intertidal species in the Fiji Is whereas *C.consors* is rare and occurs only subtidally. No intergrades between the two species have been encountered.

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#### REFERENCES

ADAMS, H., and A. ADAMS

- 1853-58 The genera of Recent Mollusca; arranged according to their organization. London, J. van Vorst, vols.1-3.
- BRATCHER, T., and W.O. CERNOHORSKY
  - 1987 Living Terebras of the World. A monograph of the Recent Terebridae of the world. American Malacologist Inc., Melbourne, Florida, 240p., pls.A-F, 1-68, textfigs.

#### CERNOHORSKY, W.O.

- 1977 The taxonomy of some Indo-Pacific Mollusca. Part 5. With descriptions of new taxa and remarks on *Nassarius albus* (Say). *Rec. Auckland Inst. Mus.* 14:121-132, 26 textfigs.
- 1978 New records of Neogastropod Mollusca from the Kermadec Islands. Rec. Auckland Inst. Mus. 15:55-65, 21 textfigs.

- 1980 The taxonomy of some Indo-Pacific Mollusca. Part 7. Rec. Auckland Inst. Mus. 16:171-187, 34 textfigs.
- 1981 Revision of J. Hervier's type specimens of Mitracea (Mollusca, Gastropoda) from the Loyalty Islands. *Bull. Mus. d'Hist. Nat. Paris* (4), 3(A-No.1):93-109, pls.1-3.
- 1986 The taxonomy of some Indo-Pacific Mollusca. Part 13. With description of a new species. *Rec. Auckland Inst. Mus.* 23:45-57, 25 textfigs.

COOMANS, H.E., R.G. MOOLENBEEK and E. WILS

1985 Alphabetical revision of the (sub)species in Recent Conidae. 7. cingulatus to cylindraceus, including Conus shikamai nomen novum. Basteria 48:223-311, figs.431-581.

GRAY, J.E.

1847 A list of the genera of Recent Mollusca, their synonyms and types. Proc. Zool. Soc. London. pp.129-219.

#### HOUBRICK, R.S.

1987 Anatomy of *Alaba* and *Litiopa* (Prosobranchia:Litiopidae): Systematic implications. *The Nautilus* 101(1):9-18, textfigs.

SOWERBY, G.B.

1859 Monograph of the genus *Phos*, Montfort. *Thes. Conchyliorum* 3(19):89-94, pls. 221,222.

WALLS, J.G.

1979 Cone shells. A synopsis of the living Conidae. T.F.H. Publ.Inc., Neptune City, N.J. 1011p., illust.

#### WATSON, R.B.

1882 Mollusca of H.M.S. "Challenger" Expedition. Part XIII. J. Linn. Soc. London Zool. 16:358-372.